Appendix 2.

Ecological Reference Worksheet

Author(s) / participant(s): Kenneth Alcon

Contact for lead author : John Tunberg **Reference site used? Yes/No** No

Date: 5/5/2005 **MLRA:** 70A **Ecological Site:** Sandy Plains This *must* be verified based on soils and climate (see Ecological Site Description). Current plant community *cannot* be used to identify the ecological site.

Indicators: For each indicator, describe the potential for the site. Where possible, **(1)** use numbers, **(2)** include expected range of values for above and below average years for **each** community within the reference state, when appropriate & **(3)** site data. Continue description on separate sheet.	Indicator Weight
1. Number and extent of rills : None	
2. Presence of water flow patterns: None	
3. Number and height of erosional pedestals or terracettes: None	
4. Bare ground from Ecological Site Description or other studies (rock, litter, lichen, moss, plant canopy are not bare ground) : 40 to 50% Bare Ground.	
5. Number of gullies and erosion associated with gullies: None	
6. Extent of wind scoured, blowouts and/or depositional areas: Very seldom, however some erosion can be expected in disturbed areas.	
7. Amount of litter movement (describe size and distance expected to travel) : None or very little if present.	
8. Soil surface (top few mm) resistance to erosion (stability) values are averages - most sites will show a range of values for both plant canopy and interspaces, if different): Soil Stability class anticipated to 3-4. These values will need to be verified in reference site.	
9. Soil surface structures and SOM content (include type and strength of structure, and A-horizon color and thickness for both plant canopy and interspaces, if different) : SOM ranges from 1-3%.	
10. Effect of plant community composition (relative proportion of different functional groups) & spatial distribution on infiltration & runoff:	
11. Prescence and thickness of compaction layer (usually none; describe soil profile features which may be mistaken for compaction on this site):	
12. Functional/Structural Groups (list in order of descending dominance by above-ground weight using symbols: indicate much greater than (>>) , greater than (>) , and equal to (=) :	
13. Amount of plant mortality and decadence (include which functional groups are expected to show mortality or decadence) :	
14. Average percent litter cover (_____ %) and depth (_____ inches).	
15. Expected annual production (this is TOTAL above-ground production, not just forage production):	
16. Potential invasive (including noxious) species (native and non-native). List species which characterize degraded states and which, after a threshold is crossed, "can, and often do , continue to increase regardless of the management of the site and may eventually dominate the site":	
17. Perennial plant reproductive capability :	

Photograph (s)

MLRA : **Date :**

Ecological Site :

Photo # 1

Comments :

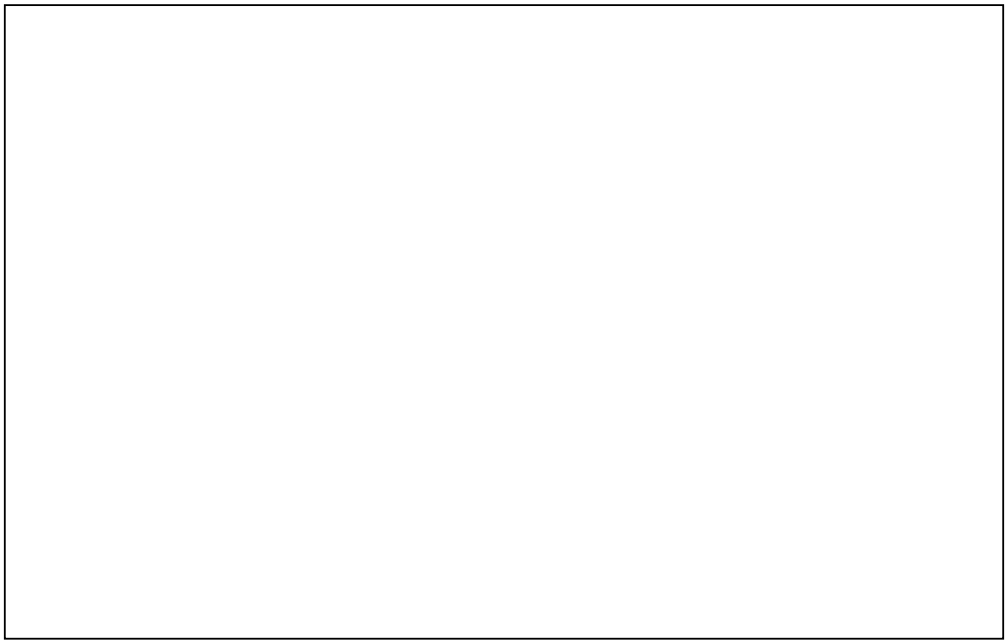

Photo # 2

Comments :

Appendix 4.

Functional / Structural Groups Worksheet

State _____ **Office** _____ **Ecological Site** _____

Observers _____ **Date** _____

Functional / Structural Groups			Species List for Functional / Structural Groups
Name	**Potential** [1]	**Actual** [2]	**Plant Names**
Biological Crust [3]			

Indicate whether each "structural/functional group" is a Dominant (D)(roughly 40-100% compositio), a**Sub-dominant (S)** (roughly 10-40%) composition) a**Minor Component (M)** (roughly 2-5% composition), or a**Trace Component (T)** (<2% composition) based on weight or cover composition in the area of interest (e.g., "Actual [2] column) relative to the "Potential [2] column derived from information found in the ecological site/description and/or at the ecological reference area.

Biological Crust [3] dominance is evaluated soley on**cover** not composition by weight